

TPX 88

Twisted Pair Matrix Switcher

UNIQUE FEATURES

- Inputs: Eight female RJ-45 connectors
- Outputs: Eight female RJ-45 connectors
- Passes analog audio from MTP Series composite video and S-video transmitters



TPX 88 A

Twisted Pair Matrix Switchers

UNIQUE FEATURES

- Inputs: Eight female RJ-45 connectors
- Outputs: Eight female RJ-45 connectors
- Separate local balanced/unbalanced stereo audio outputs
- Audio input gain and attenuation
- Decodes and passes digital audio from TP Series transmitters



COMMON FEATURES

- Fully compatible with Extron TP Series twisted pair transmitters and receivers
- Routes and distributes signals from up to eight twisted pair transmitters to eight twisted pair receivers
- QS-FPC™ - QuickSwitch Front Panel Controller
- 16 global presets
- I/O grouping
- RS-232 and RS-422 control
- Front panel security lockout
- Rack-mountable
- Internal international power supply — The 100-240VAC, 50/60 Hz, universal power supply provides worldwide power compatibility

TPX 88 Compatibility

Extron TPX 88 Matrix Switchers are compatible with the following Extron twisted pair products.

RGBHV Transmitters	RGBHV Receivers
TP T Series	TP R Series
VTT001 Series	VTR001 Series
MTP T 15HD A Series (Video only, no audio)	MTP RL 15HD A Series (Video only, no audio)
MTP T 15HD RS (Video only, no control)	MTP RL 15HD RS Series (Video only, no control)
Composite / S-Video Transmitters	Composite / S-Video Receivers
TP T Series	TP R Series
MTP T Series	MTP RL Series

DESCRIPTION

The Extron **TPX 88** and **TPX 88 A** twisted pair matrix switchers work in conjunction with Extron twisted pair transmitters and receivers to provide simplified routing of signals ranging from RGBHV to composite video or S-video and stereo audio using twisted pair cable.

Each model also includes timesaving features such as global presets for recalling predetermined configurations and various control options such as RS-232 and RS-422, the Extron MCP 1000M and MKP Series control panels and keypads, or front panel.

Capable of connecting to as many as eight twisted pair transmitters and eight twisted pair receivers, the TPX 88 and TPX 88 A twisted pair matrix switchers provide simplified signal routing and control while letting system designers and installers take advantage of the multiple benefits of A/V signal distribution over UTP cables.

Audio Encoding and Pass-Through

The TPX 88 A passes digitally encoded analog audio from TP Series transmitters, as well as analog audio from MTP Series transmitters. In addition, the TPX 88 A can decode the digital signals back to analog and output them on captive screw connectors for use in a local audio system.

The TPX 88 passes only analog audio from MTP Series composite video and S-video transmitters, when configured for stereo audio. When used with MTP 15HD Series transmitter, the TPX 88 and TPX 88 A will pass video signals only; no audio or control signals will be passed to the receiver.

MODEL

VERSION DESCRIPTION

PART

TPX 88	Twisted Pair Matrix Switcher.....	60-542-02
TPX 88 A	Twisted Pair Matrix Switcher w/Audio.....	60-542-01

Continued →

TPX 88 Series

SPECIFICATIONS

VIDEO

Routing	8 x 8 matrix
Gain	Unity
Crosstalk	-55 dB @ 10 MHz, -45 dB @ 30 MHz, -37 dB @ 100 MHz
Switching speed	200 ns (max.)

VIDEO INPUT FROM AN EXTRON OR INLINE TRANSMITTER

Number / Signal type	8 RGBHV, RGBS, RGsB, HDTV, component video, S-video, composite video
Connectors	(8) 8-pin RJ-45 female

VIDEO OUTPUT TO AN EXTRON OR INLINE RECEIVER

Number / Signal type	8 RGBHV, RGBS, RGsB, HDTV, component video, S-video, composite video
Connectors	(8) 8-pin RJ-45 female

SYNC

Input type	RGBHV, RGBS, RGsB
Output type	RGBHV, RGBS, RGsB (follows input type)
Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level	0.5 V to 5.0 Vp-p, 4.0 Vp-p normal
Output level	AGC to TTL: 4 to 5 Vp-p, unterminated

AUDIO (TPX 88 A ONLY)

Routing	8 x 8 stereo matrix
Gain	Unbalanced output: -6 dB; balanced output: 0 dB
Frequency response	20 Hz to 20 kHz, ± 0.05 dB
THD + Noise	0.03% @ 1 kHz at nominal level
S/N	>90 dB, output 21 dBu balanced (unweighted)
Crosstalk	<-80 dB @ 1 kHz, fully loaded
Stereo channel separation	>-90 dB @ 1 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz

AUDIO INPUT (TPX 88 A ONLY)

Number / Signal type	8 stereo, balanced/unbalanced
Connectors	(8) 8-pin female RJ-45
Impedance	>10k ohms balanced/unbalanced, DC coupled
Nominal level	Proprietary signal level
Maximum level	Proprietary signal level
Input gain adjustment	-18 dB to +24 dB, adjustable per input by RS-232 or front panel

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV \approx 2 dBu

AUDIO OUTPUT (TPX 88 A ONLY)

Number / Signal type	8 stereo, balanced/unbalanced
Connectors	(8) 3.5 mm captive screw connectors, 5 pole (for local audio output) (1) 8-pin female RJ-45 connector
Impedance	50 ohms unbalanced, 100 ohms balanced 100 ohms for RJ-45 connectors
Gain	Selectable output level Unbalanced -6 dB, balanced 0 dB
Gain error	± 0.1 dB channel to channel
Maximum level (H-Z)	>+21 dBu, balanced or unbalanced at 1%THD+N
Maximum level (600 ohm)	>+15 dBm, balanced or unbalanced at 1%THD+N

CONTROL / REMOTE - SWITCHER

Serial control port	RS-232 or RS-422, 5-pole captive screw connector
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Pin configurations	3 = TX, 5 = RX, 1 = GND RS-422: 2 = TX-, 3 = TX+, 4 = RX-, 5 = RX+, 1 = GND
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™)

GENERAL

Power	100 VAC to 240 VAC, 50/60 Hz, 25 watts, internal
Temperature / Humidity	Storage: -40° to +158°F (-40° to +70°C) / 10% to 90%, noncondensing Operating: +32° to +122°F (0° to +50°C) / 10% to 90%, noncondensing
Rack mount	Yes, with included brackets
Enclosure type	Metal
Enclosure dimensions	1.75" H x 17.5" W x 9.5" D (1U high, full rack wide) 4.4 cm H x 44.5 cm W x 24.1 cm D (Depth excludes connectors and knobs.)
Product weight	3.5 lbs (1.6 kg)
Shipping weight	7 lbs (4 kg)
DIM weight	25
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class B, VCCI, AS/NZS, ICES
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$. Specifications are subject to change without notice.